

Patent Claims

1. Anti-interference filter and lightning arrester device in a coaxial line for the transmission of high-frequency signals, comprising a housing (1) with two connectors (2, 3), the housing (1) forming an outer conductor connected to ground, an inner conductor (4) carried through the housing (1), a connection (5) between inner conductor (4) and housing (1) for the diverting of overvoltages and a gas capsule diverter (6) in the connection (5) between inner conductor (4) and housing (1), characterized in that in the connection (5) between inner conductor (4) and housing (1) two gas capsule diverters (6, 7) are interconnected in series, between the two gas capsule diverters (6, 7) a contact point (8) is disposed and a switching configuration (9) with an interrupter element (10) for the interruption of a current flowing across the gas capsule diverters (6, 7) is disposed between this contact point (8) and the housing (1) or ground.
2. Anti-interference filter and lightning arrester device as claimed in claim 1, characterized in that the switching configuration (9) comprises a resistance element (11) connected with the contact point (8), a voltage-limiting element (12) connected in series with this resistance element (11), and a coil (13) of a switching relay also connected in series with the resistance element (11), the diode (12) and the coil (13) of the switching relay being connected in parallel.
3. Anti-interference filter and lightning arrester device as claimed in claim 2, characterized in that the interrupter element (10) is developed as an interrupter switch (14) and installed in the connecting line (15) following the inductor (11) and this interrupter switch (14) is connected with the switching relay and is actuated by it.

4. Anti-interference filter and lightning arrester device as claimed in one of claims 1 to 3, characterized in that between the inner conductor (4) and the first gas capsule diverter (6), connected with the inner connector (4), at least one decoupling line (16) is disposed.
5. Anti-interference filter and lightning arrester device as claimed in claim 2, characterized in that the interrupter element (10) is an interrupter switch (14') and this interrupter switch (14') is installed in the inner conductor (4) and is connected with the switching relay and is actuated by it.
6. Anti-interference filter and lightning diverter device as claimed in claim 2, characterized in that the coil (13) of the switching relay has a switching delay.
7. Anti-interference filter and lightning arrester device as claimed in claim 2, characterized in that the resistance element (11) is an inductor.
8. Anti-interference filter and lightning Arrester device as claimed in claim 2, characterized in that the voltage-limiting element (12) is a diode or a voltage dependent resistor (VDR).
9. Anti-interference filter and lightning Arrester device as claimed in claim 4, characterized in that the decoupling line (16) is a $\lambda/4$ line or a resonance circuit.